8/16/05 Meeting Notes – Landfill Stability Workgroup Raptor Conference Room – South Central Region Headquarters

website: http://dnr.wi.gov/org/aw/wm/solid/landfill/stability/index.htm

Attending: Sherren Clark (BT²). Bob Ham (UW-Madison), Gerard Hamblin (WMWI), Gene Mitchell (DNR), John Reindl (Dane County), Jo-Walter Spear (J. Spear Associates), Joe Van Rossum (UW-Extension/SHWEC), Todd Watermolen (Onyx), Brad Wolbert (DNR)

- I. General: Brad Wolbert and John Reindl reported that they had summarized the group's efforts to date to several county waste managers at the July 29 meeting of WCSWMA. At the same meeting, Curtis Hartog of Foth & Van Dyke presented results from a large-scale bioreactor pilot project in Cedar Rapids (handout provided to the group). The project, generally successful so far, was designed to test the concept of sustainable landfilling, in which one year's waste is placed in an anaerobic reactor cell, allowed to react to completion over 6 to 8 years, then mined for separation of degraded organics and re-use of the reactor cell. Decomposition has been rapid, based on biological methane potential test results, and final excavation is scheduled for next year.
- II. <u>Schedule</u>: The group reviewed the timeline passed out at the July meeting. Immediate next steps are to begin sharing the preliminary rule draft within the DNR after revisions agreed upon today are incorporated. A brief cover memo describing the process and the key issues will be included.

Next month's meeting will be devoted to fine-tuning of the draft rule prior to sharing it with the landfill leachate line rule technical advisory committee. The group recommended broad distribution of the draft rule (e.g., to EPA, university researchers such as Barlaz and Reinhart, and the SWANA bioreactor committee) at the same time it is shared with the TAC. Gene requested that group members provide email addresses for anyone else they would like to have included in the distribution list.

Several group members expressed concern about the short time period from November 2006, which the tentative schedule earmarks as the effective date of the rule, and the January 1, 2007 deadline for submittal of stability plans. It was pointed out that the rule is essentially final when it is submitted to the Revisor of Statutes (projected for September, 2006). DNR agreed that if timing appears to be an issue as we move through the process, the rule could be changed to require plan submittal some number of months after the effective date of the rule.

The group agreed on the following upcoming meeting dates:

- Next group meeting: Thursday, September 15, 1:00, DNR SCR Raptor Room
- TAC meeting: Tuesday, October 18, 1:00, location to be determined by DNR
- November group meeting: Tuesday, November 15, 1:00, DNR SCR Raptor Room

III. Conceptual Draft Rule: The group discussed the following items:

 The level of discussion in the plans regarding alternate management of diverted organic materials. Some group members believe more discussion of environmental impacts of the alternative management system is needed. Others feel landfill operators should not have to report on materials they do not accept, and are not in a position to do so in any case. The group agreed that the rule should at least clarify that landfill operators do not have to describe how diverted materials will be managed if they don't know.

- "Total gas" should be defined to refer to carbon dioxide plus methane, since we are using the term in a mass balance sense to refer to carbon removed.
- Gas production rate should be expressed as cfm per unit volume, not area, since our immediate interest is not emissions, but mass (i.e., of reactive carbon).
- Section (c), regarding the goal of landfill organic stability plans, needs to contain a time element, since the point of our effort is acceleration of the time needed to achieve stability.
- The group spent a significant amount of time discussing the need for the stability plan rule to include a reward in the form of reduced proof of financial responsibility and reduced monitoring requirements, based on the reduction in risk that accompanies progress towards landfill stabilization. The current rule draft says nothing about such a reward, although the group is in general agreement on the point. We have moved forward with the expectation that the financial responsibility workgroup will decide how to associate reduced risk with a reward. Members of the stability group reiterated their feeling that operators will not have sufficient incentive to prepare serious stability plans without such a reward, even though reduced risk alone provides some incentive.

The group pointed out that the goals expressed in the draft code are aggressive, and if met, should clearly translate into significant savings. However, there are some questions about whether the goals can ever be met as written. The group generally agreed on the concept of stepped financial responsibility reductions for achievement of milestones along the way. Because the costs of implementing the plan are incurred in current dollars, while the benefits are received many years from now, the rewards need to be significant.

- The group discussed the nature of the goals in section (c), i.e., are they really intended to be met? The consensus was that the goals should be achievable, but should not be seen as standards that will be used to determine formally if a landfill has reached stability.
- The landfill operator that submits the plan will also propose the milestones used for reducing financial responsibility.
- The DNR indicated that because the financial responsibility workgroup may not be ready to propose a parallel rule at the February 2006 NR Board meeting, we will work on rule language addressing the link to financial responsibility reductions.

- It was noted that the financial responsibility workgroup was originally convened to discuss concepts such as perpetual long term care proof and the need for a landfill remediation fund. It is the position of some observers that the risks of landfills are not reflected in the current financial responsibility structure.
- The group felt the leachate goal as drafted in (c)5. does not match the original concept of using leachate quality as a goal. If it remains at all, it should just specify contaminants related to organic materials.

DNR will redraft the rule based on these comments, and also prepare a writeup and code language relating risks to milestones to financial responsibility requirements in NR 520, to the extent possible, for further discussion by the group.